

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. *(Cancelled)*.
2. *(Currently Amended)* The data backup apparatus according to claim 3 [[1]], wherein said control means supplies ~~makes~~ the dynamic RAM ~~supplied~~ with power from the main power supply during the period from the detection of the OFF command of the main power supply to completion of the changing to the self-refresh mode.
3. *(Currently Amended)* A data backup apparatus comprising:
a dynamic RAM for storing data;
detection means for detecting an OFF command of a main power supply; and
control means for changing said dynamic RAM to a self-refresh mode when said
detection means detects the OFF command of the main power supply, and feeding power from a
backup power supply to said dynamic RAM. ~~The data backup apparatus according to claim 1,~~
wherein said control means designates one memory area that receives ~~received~~ power from the backup power supply among a plurality of memory areas comprising ~~constituting~~ said dynamic RAM, and feeds power only to the ~~thus~~ designated memory area.

4. (*Original*) The data backup apparatus according to claim 3, wherein said control means indicates information regarding the memory area that receives power from the backup power supply.

5. (*Currently Amended*) The data backup apparatus according to claim 3 [[1]], wherein said control means stops feeding of power from the main power supply to a predetermined equipment, when an output voltage of the main power supply is reduced.

6. (*Currently Amended*) The data backup apparatus according to claim 3 [[1]], wherein if an SDRAM is used as the dynamic RAM, said control means and said SDRAM are kept separated from each other until initial setting of said control means is completed.

7. (*Withdrawn*) A step-up/down power supply comprising:
a step-up DC/DC converter for outputting a predetermined voltage by stepping up a voltage applied from a main power supply when the applied voltage drops below a reference voltage; and
a step-down DC/DC converter connected in series with said step-up DC/DC converter, and adapted to output a predetermined voltage by stepping down the voltage applied from the main power supply when the applied voltage rises above the reference voltage.

8. (*Withdrawn*) A step-up/down power supply according to claim 7, characterized in that said step-up DC/DC converter captures a voltage signal from outputting means for outputting a predetermined voltage, and drives a switching device.

9. (*New*) A data backup apparatus comprising:

a dynamic RAM for storing data;

a power supply detection circuit for detecting an OFF command of a main power supply;

and

a control circuit for changing said dynamic RAM to a self-refresh mode when said power supply detection circuit detects the OFF command of the main power supply, and feeding power from a backup power supply to said dynamic RAM, wherein said control circuit designates one memory area that receives power from the backup power supply among a plurality of memory areas comprising said dynamic RAM, and feeds power only to the designated memory area.

10. (*New*) The data backup apparatus according to claim 9, wherein said control means supplies the dynamic RAM with power from the main power supply during the period from the detection of the OFF command of the main power supply to completion of the changing to the self-refresh mode.

11. (*New*) The data backup apparatus according to claim 9, wherein said control means indicates information regarding the memory area that receives power from the backup power supply.

12. (*New*) The data backup apparatus according to claim 9, wherein said control means stops feeding of power from the main power supply to a predetermined equipment, when an output voltage of the main power supply is reduced.

13. (*New*) The data backup apparatus according to claim 9, wherein if an SDRAM is used as the dynamic RAM, said control means and said SDRAM are kept separated from each other until initial setting of said control means is completed.

14. (*New*) The data backup apparatus according to claim 9, wherein said control circuit further comprises a CPU and a plurality of selector circuits that control the backup power supplied to the designated memory area.

15. (*New*) The data backup apparatus according to claim 14, further comprising a reset circuit that initializes the CPU when the power supply detection circuit detects an ON command from the main power supply.

REMARKS

Claims 1-6 have been examined on their merits. Claims 7 and 8 remain withdrawn from consideration.

The Examiner objects to claims 3, 4 and 6 as being dependent upon a rejected base claim. Applicants thank the Examiner for indicating that claims 3, 4 and 6 would be allowed if rewritten in independent form.

Applicants herein cancel claim 1 without prejudice and/or disclaimer, and rewrite claim 3 in independent form, including the recitations of cancelled claim 1. Applicants have further amended claims 2, 5 and 6 to properly depend from new independent claim 3.

Applicants herein add new claims 9-15. Support for new claims 9-15 can be found, for example, on pages 4, 5, 6, 8 and 9 of the written disclosure, and in Figure 1 of the Drawings. Entry and consideration of the new claims 9-15 is respectfully requested.

Claims 2-6 and 9-15 are all the claims presently pending in the application.

1. Claim 1 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Mochizuki *et al.* (U.S. Patent No. 4,313,180) in view of Abe *et al.* (U.S. Patent No. 6,018,802) (hereinafter Abe '802). The rejection of claim 1 is now moot due to its cancellation.

2. Claims 2 and 5 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Mochizuki *et al.* in view of Abe '802 and in further in view of Abe (U.S. Patent No.

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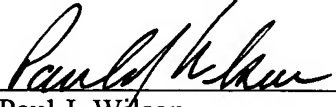
5,590,082) (hereinafter Abe '082). Applicants traverse the rejection of claims 2 and 5 for at least the reasons discussed below.

Claims 2 and 5 depend from new independent claim 3, and the Examiner indicated in the May 21, 2003 Final Office Action that claim 3 is allowable. Applicants respectfully submit that claims 2 and 5 are allowable as well, at least by virtue of their dependency from claim 3. Applicants respectfully request that the Examiner withdraw the U.S.C. § 103(a) rejection of claims 2 and 5.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


Paul J. Wilson
Registration No. 45,879

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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